A NEW ISONEUROTHRIPS FROM NEW ZEALAND (THYSANOPTERA, THRIPIDAE).

By J. C. CRAWFORD,

Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture.

A name is needed for this species, since it is reported to be doing considerable damage to the flowers of grapes in a restricted area in the Aukland district of New Zealand.

Isoneurothrips obscuratus, new species.

Female.—Length (distended) 1.45 mm. Dark brown, head and thorax more or less reddish brown; antenna entirely dark brown, except for a narrow whitish ring just beyond pedicel of segment III and base of IV beyond pedicel somewhat lightened; femora concolorous with body, tibiae distinctly lighter than femora and lightened apically, tarsi yellowish; forewing dark, with an almost hyaline band beyond scale. Antennal segments III, IV, and VI subequal in length; fore vein with a complete and continuous row of bristles which number distinctly more than those on hind vein; comb on abdominal tergum VIII complete but the spines sparse, mostly in groups of two, each spine on an enlarged base; sterna III–VII each with from three to five pairs of accessory bristles.

Head distinctly wider than long, constricted just behind eyes so that the eyes appear somewhat bulging; with very distinct transverse anastomosing lines; occipital carina much darker brown than rest of head; ocelli large, in an equilateral triangle, with brownish-red crescents, posterior ocelli well separated from eyes; facets of eyes large, two or three ventro-caudal ones larger than the rest; eyes strongly but sparsely pilose; interocellar bristles about on a line tangent to the posterior margin of anterior ocellus and just outside of a line tangent to the outer margins of the anterior and posterior ocelli; postocular row of bristles with one bristle back of ocelli, the one next outwardly and one almost at lateral margin of head longest, subequal.

Pronotum with sculpture similar to that of head, but closer and more delicate; mesonotum with similar but still closer and stronger sculpture; pronotum with strong discal bristles, of which only a pair situated near lateral margins at about one-third the length of pronotum from posterior margin are distinctly longer and stronger than the rest; posterior margin of pronotum with 3 pairs of bristles between the postangulars; fore vein of anterior wings with 18 to 20 bristles, those distad only slightly farther apart than those basad; hind vein with 13 to 15 bristles.

Abdomen normal, basal subcostal lines of terga almost black; tergum X not contracted medially at sides, split open above almost to base.

Measurements (in microns): Head, length 114, length from front of eye to occipital carina 104, width across eyes 152, greatest width across cheeks 156; interocellar bristles circa 22 to 24; longest postoculars about 30. Prothorax, length 144, width 208; long anteriorly directed bristle at anterior angle 26; postangulars, outer 88, inner 92; middle pair of postmarginals 24, inner postmarginals 38; long pair of bristles on lateral margins 44; wing 860. Bristles on tergum IX, outer 124, middle 112, inner 72; on tergum X, both pairs 102.

Antennae:	1	2	3	4	5	6	7
Length	36	44	60	60	42	60	20
Width	30	24	21	22	20	20	9

Described from eight females with the record, "Henderson, Auckland [New Zealand], Dec. 20, 1940, ex grape flowers, W. Lindeman coll.'

Type Catalogue No. 55193, U. S. National Museum.

In most of the paratypes the tarsi are distinctly brownish and in the lighter-colored specimens there is less contrast in color between the femora and the tibiae and less apical fading on the tibiae.

Five of the specimens have both antennae with seven segments; one has the left antenna seven-segmented and the right with the distal segments missing; one has the left style missing and the right antenna eight-segmented; and one has the left

antenna seven- and the right eight-segmented.

The described species of the genus which have a complete comb differ, in part, as follows: Isoneurothrips antennatus Mlt. has antenna III (60 μ) much longer than VI (48 μ); debautiae Mlt. has antenna I-IV whitish, and wing and body bristles transparent, except for brown postangulars and bristles at apex of abdomen; fullowayi Mlt. has antenna III (45 μ) much longer than VI (36 \mu); pallipes Mlt. has antenna III (39 \mu) distinctly shorter than VI (48 μ); sumatrensis Pr. has antenna III entirely, and IV and V at base, clear yellow, and the bristles on fore vein outwardly are spread apart so that there appear to be a basal series of 11-13 followed by a distal series of 4 or 3 with a total of 15 or 16, hind vein with 14-16; sumatrensis var. cinchonae Pr. (to which obscuratus runs in Priesner's key1) is said to have the prothorax longer than wide (!), antenna III yellow and distinctly longer than VI, postangulars shorter (62μ) , and the wing bristles as in the typical form; williamsi Mlt. has antenna III (51 μ) longer than VI (45 μ), antenna I whitish, II and basal one-third of III brownish yellow, concolorous with head, general body color brownish yellow.

The species for which the status of the comb on tergum VIII is not stated in the descriptions differ in part as follows: australis Bagn. is a yellow species; orientalis Bagn. has antenna III yellow white and, according to Priesner (l. c., ante), the comb incomplete; multispinus Bagn, has the interocellars as long as the postoculars, the spines on the fore and hind veins equal in number, and the fore tibiae yellow; setifer Ky. has the head

longer than wide.

¹ Natuurk. Tijdschr. Ned.-Ind., vol. 94, pp. 284 et seq., 1934.